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| 10/029,772 | 12/21/2001 | Huayan Wang | 1273 | 4705 |

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| EXAMINER | |
|---|---|
| ZHONG, CHAD | |
| **ART UNIT** | **PAPER NUMBER** |
| 2152 | 5 |

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|---|---|---|
| | 10/029,772 | WANG ET AL. |
| | Examiner | Art Unit |
| | Chad Zhong | 2152 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *21 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

1. Claims 1-28 are presented for examination.

2. It is noted that although the present application does contain line numbers in specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant all future correspondence should include the recommended line numbering.

3. Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of US filed applications in the specification should also be updated where appropriate.

4. The use of the trademark ThingMagic among others have been noted in this application (pg 5). It should be capitalized wherever it appears and be accompanied by the generic terminology. Appropriate correction is required throughout the application.

### *Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371 (c) of this title before the invention thereof by the applicant for patent.

6. Claims 1-3, 6, 10-12, 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Lewis et al. (hereinafter Lewis), US 6,233,565.

7. As per claim 1, Lewis teaches a security envelope, comprising:

a barcode in a two-dimensional symbology located on the security envelope, the barcode encoding (Col. 36, lines 55-65):

a public component, the public component comprising a public digital mail identification and a digital signature signed by the sender encrypted by the private key of the sender (Col. 31, lines 25-45); and

a private component, the private component comprising a private digital mail identification and a digital signature signed by the sender encrypted by the public key of the receiver (Col. 31, lines 25-45, lines 5-15; Col. 28, lines 50-60).

8. As per claim 2, Lewis teaches the security envelope as in claim 1, where the two-dimensional symbology is PDF-417 (Col. 36, lines 55-65).

9. As per claim 3, Lewis teaches the security envelope as in claim 2, wherein the barcode further encodes return address information (Col. 35, lines 60-67).

10. As per claim 6, Lewis teaches the security envelope as in claim 2, wherein the barcode further encodes stamp information (Col. 25, lines 15-30).

11. As per claims 10-12, 15, claims 10-12, 15 are rejected for the same reasons as rejection to claims 1-3, and 6 above respectively.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. Claims 4-5, 7-9, 13-14, 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (hereinafter Lewis), US 6,233,565, in view of Applicant Admitted Prior Art (hereinafter AAPA).

14. As per claim 4, Lewis does not explicitly teaches the security envelope as in claim 2, wherein the barcode further encodes information relating to the physical characteristics of the security envelope.

15. AAPA teaches the above section in specification pg 6, lines 1-15.

16. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of AAPA and Lewis because they both dealing with mail security. Furthermore, the teaching of AAPA to allow
wherein the barcode further encodes information relating to the physical characteristics of the security envelope
would improve the security measures for Lewis's system by encoding additional information within the barcode.

17. As per claim 5, Lewis teaches the security envelope as in claim 4, wherein the information relating to the physical characteristics of the security envelope include at least one of:

(a) the date the security envelope was sealed;

(b) the size of the security envelope; and

(c) the weight of the security envelope (Table 2; Col. 20, lines 35-45, lines 55-67).

18. As per claim 7, Lewis does not explicitly teaches the security envelope as in claim 2, wherein the security envelope further comprises a physical authentication identification and wherein the barcode further comprises a digital representation of the physical authentication identification.

19. AAPA teaches the above sections in specification pg 6, lines 1-15

20. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of AAPA and Lewis because they both dealing with mail security. Furthermore, the teaching of AAPA to allow
wherein the security envelope further comprises a physical authentication identification and wherein the barcode further comprises a digital representation of the physical authentication identification
would improve the security measures for Lewis's system by encoding additional information within the barcode.

21. As per claim 8, Lewis does not explicitly teaches the security envelope as in claim 7, where the physical authentication identification comprises an optically clear epoxy with air bubbles suspended therein.

22. AAPA teaches the above sections in page 5 of specification.

23. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of AAPA and Lewis because they both dealing with mail security. Furthermore, the teaching of AAPA to allow
where the physical authentication identification comprises an optically clear epoxy with air bubbles suspended therein
would improve the security measures for Lewis's system by encoding additional information using additional technique within the barcode.

24. As per claim 9, Lewis does not explicitly teach the security envelope as in claim 7, where the physical authentication identification comprises a cloth made from non-woven 40 micron diameter

polymer fibers.

25. AAPA discloses the above section in page 5 of specification.

26. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of AAPA and Lewis because they both dealing with mail security. Furthermore, the teaching of AAPA to allow

where the physical authentication identification comprises a cloth made from non-woven 40 micron diameter polymer fibers

would improve the security measures for Lewis's system by encoding additional information using additional technique within the barcode.

27. As per claims 13-14, 16-17, claims 13-14 and 16-17 are rejected for the same reasons as rejection to claims 4-5 and 8-9 above respectively.

28. Claims 18- 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (hereinafter Lewis), US 6,233,565, in view of Moore US 5,917,925.

29. As per claim 18, Lewis does not explicitly teach the method as in claim 11, further comprising:

measuring the physical identification information; decoding the digital mail identification;

comparing the measured physical identification information with the decoded digital mail identification.

30. Moore teaches the above section in the sample sections of Col. 4, lines 47 – Col. 5, lines 11, wherein the ID information being compared are stored in the database remotely or locally. These ID information inherently must be measured/predetermined/tabulated prior to this comparison process.

31. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Moore and Lewis because they both dealing with mail security. Furthermore, the teaching of Moore to allow

measuring the physical identification information; decoding the digital mail identification;

comparing the measured physical identification information with the decoded digital mail identification.

would improve the security measures for Lewis's system by checking to see if the information received is the correct information pertaining to the user via an authentication scheme.

32. As per claim 19, Lewis teaches the method as in claim 18, wherein at least one of the steps of (1) measuring the physical identification information, and (2) decoding the digital mail identification is accomplished using an optical scanner (Col. 36, lines 35-65).

33. As per claim 20, Lewis does not explicitly teach the method as in claim 19, wherein the step of comparing the measured physical identification information with the decoded digital mail identification is accomplished using a mobile computer.

34. Moore teaches the above section in Col. 5, lines 1-10 and Col. 26, lines 37-54.

35. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Moore and Lewis because they both dealing with mail security. Furthermore, the teaching of Moore to allow

wherein the step of comparing the measured physical identification information with the decoded digital mail identification is accomplished using a mobile computer.

would improve the mobility for Lewis's system by extending this type of operation into the field carried by company workers.

36. As per claim 21, Lewis does not explicitly teach the method as in claim 19, further comprising: transmitting the measured physical identification information and the decoded digital mail identification to a wired computer network via a wireless medium.

37. Moore teaches the above section on sample section of Col. 26, lines 37-56, Col. 11, lines 5-20.

38. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Moore and Lewis because they both dealing with mail security. Furthermore, the teaching of Moore to allow
transmitting the measured physical identification information and the decoded digital mail identification to a wired computer network via a wireless medium
would improve the storage ability for Lewis's system by keeping track of all the events occurring with the package scanning.

39. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (hereinafter Lewis), US 6,233,565, in view of Moore US 5,917,925, in further view of 'Official Notice'.

40. As per claim 22, Lewis and Moore do not explicitly teach the method as in claim 21, wherein the wired computer network is connected to the Internet and the transmitting the identification data to a wired computer network via a wireless medium uses a TCP/IP protocol. "Official Notice" is taken that the concept and advantages of providing for TCP/IP in a wireless network is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include wireless TCP/IP with Lewis and Moore because it would provide for a robust connection oriented transfer medium.

41. Claims 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (hereinafter Lewis), US 6,233,565, in view of Manduley et al. (hereinafter Manduley) US 5,079,714, in further view of Applicant Admitted Prior Art (hereinafter AAPA).

42. As per claim 23, Lewis teaches a system of securing the mails, comprising:

(1) at least one security envelope, comprising

(a) a barcode in a two-dimensional symbology located on the security envelope, the barcode encoding:

(i) a public component, the public component comprising a public digital mail identification and a digital signature signed by the sender encrypted by the private key of the sender; and

(ii) a private component, the private component comprising a private digital mail identification and a digital signature signed by the sender encrypted by the public key of the receiver; (the above sections are rejected for the same reasons as rejection to claim 1 above)

(2) at least one mobile computer, comprising:

(a) a bar code reader (Fig 4A, 4B);

(d) a database capable of storing at least one public key and at least one private key (Col. 31, lines 25-45);

(e) a display (Fig 1); and

(f) a printer (Fig 1).

43. Lewis does not explicitly teache

(b) a physical authentication identifier reader;

(c) a computer capable of comparing information obtained from the bar code reader and the physical authentication identifier reader.

44. AAPA teaches part (b) in specification of page 5-6

45. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of AAPA and Lewis because they both dealing with mail security. Furthermore, the teaching of AAPA to allow

a physical authentication identifier reader

would improve the security measures for Lewis's system by encoding additional information using additional technique within the barcode.

46. Manduley teaches section (c) of the above in the sample section of Col. 4, lines 12-55, wherein the ZIP code are read from the envelope themselves and is considered as a physical authentication for verifying the address details, here we have a comparison between the bar-coded data and the authentication data and its authenticity being determined.

47. It would have been obvious to one of ordinary skill in this art at the time of invention was made to combine the teaching of Manduley and Lewis because they both dealing with mail security. Furthermore, the teaching of Manduley to allow

a computer capable of comparing information obtained from the bar code reader and the physical authentication identifier reader

would improve the security measures for Lewis's system by making a comparison from the data obtained and make a judgment based on these data.

48. As per claim 24-26, claims 24-26 are rejected for the same reason as rejection to claims 2, 8-9 above respectively.

49. Claims 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (hereinafter Lewis), US 6,233,565, in view of Manduley et al. (hereinafter Manduley) US 5,079,714, in further view of Applicant Admitted Prior Art (hereinafter AAPA), in further view of "Official Notice"

50. As per claim 27, Lewis, Manduley and AAPA does not explicitly teach the system as in claim 24, further comprising: a wired computer network capable of communication with the at least one mobile computers via a wireless medium. "Official Notice" is taken that the concept and advantages of providing for wireless medium in communication with a wired network is well known and expected in the art. It would have been obvious to one of ordinary skill in the art to include the said section with Lewis, Manduley and AAPA because it would provide for greater mobility between the client and the server.

51. As per claim 28, claim 28 is rejected for the same reasons as rejection to claim 22 above.

***Conclusion***

52. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to method of providing router with subnetwork address pool in a cellular telecommunications network.

i. US 2001/0003823 Mighdoll et al.

ii. US 6,002,720 Yurt et al.

iii. US 2002/0069113 Stern

iv. US 6,412,073 Rangan.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (703) 305-0718. The examiner can normally be reached on M-F 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 703-305-8498. The fax phone numbers for the organization where this

application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

CZ
September 22, 2004

ZARNI MAUNG
PRIMARY EXAMINER